

Title (en)  
METHOD FOR PRODUCING A RADIOPHARMACEUTICAL COMPOSITION

Title (de)  
VERFAHREN ZUR HERSTELLUNG EINER RADIOPHARMAZEUTISCHEN ZUSAMMENSETZUNG

Title (fr)  
PROCÉDÉ DE PRODUCTION DE COMPOSITION RADIOPHARMACEUTIQUE

Publication  
**EP 3536686 A1 20190911 (EN)**

Application  
**EP 19160258 A 20190301**

Priority  
JP 2018040919 A 20180307

Abstract (en)  
A simple method for producing a clinically applicable radiopharmaceutical composition containing 1-(2,2-dihydroxymethyl-3-[F]fluoropropyl)-2-nitroimidazole ([F]DiFA) or a salt thereof as an active ingredient, is provided which includes a synthesis step of obtaining a crude product of [F]DiFA from a labeling precursor compound for [F]DiFA; and a purification step of purifying the crude product, in which the purification step includes purifying [F]DiFA using two or more different types of reverse phase solid phase extraction cartridges.

IPC 8 full level  
**C07D 233/94** (2006.01); **A61K 51/04** (2006.01); **C07B 59/00** (2006.01)

CPC (source: EP US)  
**A61K 51/0453** (2013.01 - EP US); **C07B 59/002** (2013.01 - EP US); **C07D 233/91** (2013.01 - US); **C07D 233/94** (2013.01 - EP US); **C07B 2200/05** (2013.01 - US)

Citation (applicant)  
• WO 2013042668 A1 20130328 - NIHON MEDIPHYSICS CO LTD [JP], et al  
• JP 2015081242 A 20150427 - NIHON MEDIPHYSICS CO LTD, et al  
• JP 2015504443 A 20150212  
• JP 2018040919 A 20180315 - CANON KK  
• "Greene's Protective Groups in Organic Synthesis", JOHN WILEY & SONS INC

Citation (search report)  
• [YDA] JP 2015081242 A 20150427 - NIHON MEDIPHYSICS CO LTD, et al  
• [YA] K. E. KNOTT ET AL: "Simplified and automatic one-pot synthesis of 16[alpha]-[18F]fluoroestradiol without high-performance liquid chromatography purification : Automatic one-pot synthesis of 16[alpha]-[18F]fluoroestradiol", JOURNAL OF LABELLED COMPOUNDS AND RADIOPHARMACEUTICALS, vol. 54, no. 12, 1 October 2011 (2011-10-01), GB, pages 749 - 753, XP055592833, ISSN: 0362-4803, DOI: 10.1002/jlcr.1916

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Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
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DOCDB simple family (application)  
**EP 19160258 A 20190301**; AU 2019201390 A 20190227; CA 3034905 A 20190226; JP 2018040919 A 20180307; US 201916288855 A 20190228